CLAIM AMENDMENTS

- 1. (Previously presented) A process for the synthesis of
- monohydrate and crystal modifications of fluconazole of formula (I)

$$\begin{array}{c|c}
N & OH & N \\
N - CH_2 - C - CH_2 - N & N
\end{array}$$

$$F \qquad (I)$$

- 4 comprising the steps of:
 - a.) hydrolyzing a silyl ether derivative of formula (II)

$$R^{2}-S_{i}-R^{4}$$

$$0$$

$$N-CH_{2}-C-CH_{2}-N$$

$$F$$
(II)

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- wherein the meaning of R² is hydrogen, or a C₁-C₁₀ alkyl or phenyl group, R³ and R⁴ independently of each other are a C₁-C₁₀ alkyl or phenyl group at a pH preferably either below 3 or above 8 in an aqueous solution,
- then cooling the obtained reaction mixture containing the fluconazole of formula (I) and isolating the precipitated fluconazole monohydrate and optionally

dissolving the fluconazole monohydrate obtained from the hydrolysis of silyl-fluconazole in a C_1 - C_4 straight or branched chain alcohol at boiling temperature and cooling the solution with a speed of 5-15 °C/h to obtain the crystal modification II of fluconazole, or

- b.) dissolving anhydrous fluconazole or monohydrate of it in a C_1 - C_4 straight or branched chain alcohol at boiling temperature and cooling the solution with a speed of 5-15 °C/h to obtain the crystal modification II of fluconazole, or
- c.) drying slowly fluconazole monohydrate after seeding preferably with seeding crystals of crystal modification II at 30-70 °C, preferably in vacuum to obtain the crystal modification II of fluconazole, or
- d.) drying fast fluconazole monohydrate after seeding preferably with seeding crystals of crystal modification I at 80 °C, to obtain the crystal modification I of fluconazole.

- 2. (Previously presented) The process according to claim
 1, characterized by carrying out the hydrolysis of silyl ether
 3 derivatives of formula (II) wherein the meaning of R², R³ and R⁴
 4 is as defined in claim 1 in aqueous methanolic solution in the
 5 presence of sodium hydroxide.
- 3. (Previously presented) The process according to claim
 1, characterized by carrying out the hydrolysis of silyl ether
 3 derivatives of formula (II) wherein the meaning of R², R³ and R⁴
 4 is as defined in claim 1 in aqueous sodium hydroxide solution.
- 4. (Previously presented) The process according to claim
 1, c h a r a c t e r i z e d b y using a silyl ether
 3 derivative of formula (II), wherein R², R³ and R⁴ are methyl groups,
 4 as starting material.
- 5. (Previously presented) The process according to claim
 1 for the synthesis of crystal modification II of fluconazole,
 2 characterized by cooling the solution of
 4 anhydrous fluconazole or monohydrate of it in isopropanol obtained
 5 at boiling temperature with a speed of 10 °C/h.

- 6. (Previously presented) The process according to claim
- 2 1 for the synthesis of crystal modification II of fluconazole,
- 3 characterized by cooling the solution of
- 4 anhydrous fluconazole or monohydrate of it in ethanol obtained at
- 5 boiling temperature with a speed of 10 °C/h.
- 7. (Previously presented) The process according to claim
- 2 1 for the synthesis of crystal modification II of fluconazole,
- 3 characterized by cooling the solution of
- 4 anhydrous fluconazole or monohydrate of it in sec-butanol obtained
- 5 at boiling temperature with a speed of 10 °C/h.
- 8. (Previously presented) The process according to claim
- 2 5 characterized by cooling the solutions to 0 °C.
- 9. (Previously presented) The process according to claim
- 2 1 for the synthesis of crystal modification II of fluconazole,
- 3 characterized by drying the fluconazole
- 4 monohydrate in the presence of seeding crystals of crystal
- 5 modification II with stirring, in vacuum at 40 °C for 2 h, then at
- 6 70 °C for 4 h.

- 10. (Previously presented) The process according to claim
- 1 for the synthesis of crystal modification I of fluconazole,
- characterized by drying the fluconazole
- 4 monohydrate in the presence of seeding crystals of crystal
- modification I with stirring, in vacuum at 80 °C for 4 h until the
- 6 weight is constant.
- 11. (New) Fluconazole monohydrate having a melting point
- of 139° to 140° C prepared by the process defined in claim 1.